

AMENDMENTS TO THE CLAIMS

AI
Sub B1
1. (Currently Amended) ~~A file cache management system for managing a plurality of files operable to be provided by an application running on a server computer system to at least one client computer system, wherein at least one of the plurality of files includes presentation information characterized by a first presentation state, the file cache management system~~ The dynamic content caching and retrieval system of claim 45 further comprising:

a subsequent presentation state computation routine operable to cause at least one subsequent presentation state to be computed based on the ~~first presentation state~~ presentation state signature; and

a presentation state signature computation routine operable to determine a presentation state signature ~~from at least one of the first presentation state and the at least one~~ for one or more subsequent presentation state states.

2. (Currently Amended) ~~The file cache management~~ dynamic content caching and retrieval system of claim 45 wherein ~~the server computer system includes a processor, and wherein at least one of the subsequent presentation state computation routine and the presentation state signature computation routine is~~ are encoded in a the computer readable medium as instructions executable on the processor, and the computer readable medium being one of a magnetic storage medium, an optical storage medium, and a communications medium conveying signals encoding the instructions.

3. (Currently Amended) ~~The file cache management~~ dynamic content caching and retrieval system of claim 45 wherein at least a portion of the presentation information is encoded in a markup language.

4. (Currently Amended) ~~The file cache management~~ dynamic content caching and retrieval system of claim 3 wherein the markup language is one of Hypertext Markup Language (HTML) and Extensible Markup Language (XML).

5. (Currently Amended) ~~The file cache management~~ dynamic content caching and retrieval system of claim 1 further comprising a presentation information computation routine

operable to compute subsequent presentation information based upon the at least one subsequent presentation state.

6. (Currently Amended) ~~The file cache management system of claim 1 wherein the file cache management system is operable to receive a second presentation state, the file cache management system further comprising a presentation information computation routine operable to compute presentation information based upon the second presentation state~~ dynamic content caching and retrieval system of claim 45 further comprising:

a plurality of additional computer readable representations from one or more client computing systems, each of the computer readable representations having a presentation state signature based on a presentation state defined, at least in part, by one or more parameters selected by a user interacting with a file displayed by one of the client computing system that are useful to identify one of the dynamically generated electronic files in which stored presentation information is associated with the presentation state upon which the signature is based;
wherein the routine is further executable by the processor to determine if the presentation state signatures of the computer readable representations identify one of the dynamically generated electronic files stored in the memory of the system, retrieving the described dynamically generated electronic files, and serving the retrieved files to the client computer system from which the computer readable representation was received.

7. (Currently Amended) ~~The file cache management~~ dynamic content caching and retrieval system of claim 6 wherein the subsequent presentation state computation routine is operable to cause at least one second subsequent presentation state to be computed based on the second presentation state further comprising:

a subsequent presentation state computation routine operable to cause at least one subsequent presentation state to be computed based on each presentation state signature; and
a presentation state signature computation routine operable to determine a presentation state signature for each subsequent presentation state.

8. (Canceled)

A2 9. (Currently Amended) ~~The file-cache management~~ dynamic content caching and retrieval system of claim 8 1 wherein the plurality of files includes a second presentation file comprising the presentation information based upon the second presentation state, and a filename based upon the second presentation state signature wherein the computer readable representation is uniform resource locator that includes a filename and state information for one of the dynamically generated electronic files.

10. (Canceled)

A3 11. (Currently Amended) ~~The file-cache management~~ dynamic content caching and retrieval system of claim 4 45 further comprising a file cache operable to store at least one of the plurality of files the dynamically generated electronic files.

12. (Currently Amended) ~~The file-cache management~~ dynamic content caching and retrieval system of claim 11 wherein the file cache is a file server computer system.

13. (Currently Amended) ~~The file-cache management~~ dynamic content caching and retrieval system of claim 4 45 wherein the presentation state signature computation routine uses a hashing function to determine the presentation state signature.

14. (Currently Amended) ~~The file-cache management~~ dynamic content caching and retrieval system of claim 13 wherein the hashing function is a one-way hashing function.

15. (Currently Amended) ~~The file-cache management~~ dynamic content caching and retrieval system of claim 14 wherein the one-way hashing function is one of Snefru, N-Hash, MD5, Secure Hash Algorithm (SHA), RIPE-MD, and HAVAL.

16. (Canceled).

AA 17. (Currently Amended) ~~The file-cache management~~ dynamic content caching and retrieval system of claim 16 wherein the at least one of the plurality of files further includes a each computer readable representation is a Universal Resource Locator (URL) comprising the

subsequent presentation state and the subsequent presentation state signature based on the presentation state.

18. (Canceled) The ~~file cache management~~ dynamic content caching and retrieval system of claim 4 wherein the one or more parameters selected by a user include configuration options selections, at least one subsequent presentation state is determined by one or more options selectable by a user when the user interacts with a presentation caused when the at least one of the plurality of files is processed by the at least one client computer system.

19. (Currently Amended) The ~~file cache management~~ dynamic content caching and retrieval system of claim 4 wherein the computer readable medium further includes state information that at least one subsequent presentation state includes subsequent presentation state computation routine version information of the file displayed by the client computing system.

20. (Canceled).

21. (Currently Amended) The ~~file cache management~~ dynamic content caching and retrieval system of claim 1 further comprising a file cache and a look-ahead manager, the look-ahead manager operable to perform at least one of:

determining if the file cache includes a dynamically generated electronic file having presentation information characterized by the ~~at least one subsequent presentation state~~ presentation state signature for one or more subsequent presentation states; and

causing a presentation information computation routine to ~~computer~~ compute subsequent presentation information based upon the ~~at least one subsequent presentation state~~ one or more subsequent presentation states.

22. (Currently Amended) The ~~file cache management~~ dynamic content caching and retrieval system of claim 21 wherein the determining is if the file cache includes a dynamically generated electronic file includes searching the file cache for a file having a filename including the presentation state signature from the ~~at least one subsequent presentation state~~ computer readable representation.

1 23. (Currently Amended) The ~~file-cache-management~~ dynamic content caching and
2 retrieval system of claim 1 45 further comprising a web server application operable to receive,
3 ~~from the application, the information provided to the at least one client computer system, the~~
4 computer readable representation wherein the web server is operable to transmit serve the
5 information provided to the at least one client computer system and to serve the retrieved file to
6 the client computer system.

1 24. (Currently Amended) The ~~file-cache-management~~ dynamic content caching and
2 retrieval system of claim 1 45 wherein the ~~application is~~ routine comprises a web server
3 application.

25. (Canceled).

Ab 1 26. (Currently Amended) The ~~file-cache-management~~ dynamic content caching and
2 retrieval system of claim 1 45 wherein the client ~~computer~~ computing system is one of a plurality
3 of interconnected client ~~computer~~ computing systems operating in a distributed computing
4 environment and coupled to ~~the~~ a server computer system.

1 27. (Currently Amended) The ~~file-cache-management~~ dynamic content caching and
2 retrieval system of claim 26 wherein the plurality of interconnected client ~~computer~~ computing
3 systems and the server computer system are coupled via a network.

1 28. (Currently Amended) The ~~file-cache-management~~ dynamic content caching and
2 retrieval system of claim 27 wherein the network is the Internet and each of the files are web
3 pages.

1 29. (Currently Amended) A method of caching a ~~file including~~ and retrieving cached
2 dynamically generated files that each include presentation information characterized by a ~~first-~~
3 state respective presentation states, the file operable to be provided by an application running on
4 a server computer system to at least one client computer system, the method comprising:
5 receiving a file request ~~including~~ that includes information based on selections of a user
6 interacting with a web page using ~~the first state from the~~ at least one client
7 computer system;

8 determining whether the file request identifies one of the cached dynamically generated
 9 files exists in a cache;
 10 retrieving the dynamically generated file identified by the file request and transmitting
 11 the file to the at least one client computer system ~~when~~ if the file exists in a cache;
 12 computing presentation information based on the first state information in the file request
 13 ~~when the~~ a dynamically generated file does not exist in the cache; and
 14 saving the computed presentation information in a file in the cache, thus creating a
 15 dynamically generated file, and transmitting the dynamically generated file to the
 16 at least one client computer system.

1 30. (Currently Amended) The method of claim 29 wherein the file request includes at
 2 least one of a filename based on the first state, and first state information.

1 31. (Currently Amended) The method of claim 29 wherein the file request includes a
 2 filename computed from ~~first state information~~ the information based on selections by a user
 3 interacting with a web page using a hash function.

1 32. (Original) The method of claim 34 wherein the hash function is a one-way hash
 2 function.

1 33. (Original) The method of claim 29 wherein the file request is a URL.

A7 1 34. (Currently Amended) The method of claim 29 wherein the determining whether
 2 the file request identifies one of the cached dynamically generated files further comprises
 3 monitoring for a file not found error, and ~~causing the computing~~ the presentation information
 4 when a file not found error occurs.

1 35. (Original) The method of claim 34 wherein the file not found error is an HTTP
 2 error 404.

A8 1 36. (Currently Amended) The method of claim 29 wherein the computing
 2 presentation information further comprises:
 3 computing at least one subsequent state based on the ~~first state~~ the selections by a user
 4 interacting with a web page;

5 computing a signature of the at least one subsequent state based on at least one
 6 subsequent state; and
 7 including the signature of the at least one subsequent state and the at least one subsequent
 8 state in the presentation information.

1 37. (Original) The method of claim 29 encoded in a computer readable medium as
 2 instructions executable on a processor, the computer readable medium being one of a magnetic
 3 storage medium, an optical storage medium, and a communications medium conveying signals
 4 encoding the instructions.

A9 1 38. (Currently Amended) Dynamically generated files created in accordance with the
 2 method of claim 29. ~~A file encoded in a computer readable medium as instructions executable on~~
 3 ~~a processor, wherein the computer readable medium is one of a magnetic storage medium, an~~
 4 ~~optical storage medium, and a communications medium conveying signals encoding the~~
 5 ~~instructions, the file including:~~
 6 ~~presentation information characterized by a presentation state; and~~
 7 ~~a filename computer from the presentation state.~~

1 39. (Currently Amended) The file dynamically generated files of claim 38 wherein at
 2 least a portion of the presentation information of each dynamically generated file is encoded in a
 3 markup language.

1 40. (Currently Amended) The file of claim 39 wherein the markup language is one of
 2 Hypertext Markup Language (HTML) and Extensible Markup Language (XML).

Claims 41 -43 (Canceled).

A10 1 44. (Original) The dynamically generated files of claim 42 further comprising 38
 2 wherein the web page is a product configuration web page and the file request is a Universal
 3 Resource Locator (URL) including the at least one subsequent presentation state and the at least
 4 one associated subsequent presentation state signature that includes state information comprising
 5 information based on user configuration selections.

1 45. (New) A dynamic content caching and retrieval system that facilitates reusability of
2 dynamically generated electronic files, the system comprising:
3 a processor;
4 *A11* a computer readable medium coupled to the processor;
5 dynamically generated electronic files stored in a storage medium, each dynamically
6 generated electronic file includes an identifier that is derived from dynamically
7 generated presentation information stored in the file; and
8 a computer readable representation received by the system from a client computing
9 system, the computer readable representation having a presentation state signature
10 based on a presentation state defined, at least in part, by one or more parameters
11 selected by a user interacting with a file displayed by the client computing system
12 that are useful to identify one of the dynamically generated electronic files in
13 which stored presentation information is associated with the presentation state
14 upon which the signature is based;
15 wherein the computer readable medium includes a routine executable by the processor to
16 determine if the presentation state signature of the computer readable
17 representation identifies one of the dynamically generated electronic files stored
18 in the memory of the system, retrieving the described dynamically generated
19 electronic file and serving the retrieved file to the client computer system.

1 46. (New) A dynamic content caching and retrieval system that facilitates reusability of
2 cached dynamically generated electronic files, the system comprising:
3 means for receiving a file request that includes information based on selections of a user
4 interacting with a web page using at least one client computer system;
5 means for determining whether the file request identifies one of the cached dynamically
6 generated electronic files;
7 means for means for retrieving the dynamically generated electronic file identified by the
8 file request and transmitting the file to the at least one client computer system if
9 the file exists in a cache;

10 means for computing presentation information based on the information in the file
11 request when a dynamically generated file does not exist in the cache; and
12 means for saving the computed presentation information in a file in the cache, thus
13 creating a dynamically generated file, and transmitting the dynamically generated
14 file to the at least one client computer system.
